Permit No.: 06S1261P6302

Scan Code: 07

MAR 25 2014

REPLY TO: 6WQ-S

Certified Mail #7012 3050 0001 6500 2505 - Return Receipt Requested

Mr. Lanny Woods Jireh Resources, LLC 2526 E. 71st St., Suite A Tulsa, OK 74136

Re: Draft UIC Permit and Statement of Basis

Permit No. 06S1261P6302- Osage County, Oklahoma

Dear Mr. Woods:

Enclosed are the public notice, statement of basis, and the permit which have been drafted by this Agency under the authority of the Safe Drinking Water Act. Any comments you wish to make may be submitted in writing by the due date stated in the public notice to Ms. Evelyn Rosborough at the EPA address above.

The Bureau of Indian Affairs (BIA) also requires that you apply for and receive authorization to complete the work described in the referenced permit application. Both EPA and BIA authorizations must be received prior to the commencement of this work. Please contact the BIA office at (918) 287-5710 for further information.

If you have any questions, or would like to discuss this permit, please contact the permit writer, Mr. Bill Hurlbut at (214) 665-8305.

Sincerely yours,

Stacey B. Dwyer, P.E. Associate Director Source Water Protection Branch

Enclosures

cc: with enclosures

BIA, Minerals Branch

Osage UIC Office 3/10/14

6WQ-SG: BHURLBUT: 3/7/14 06S1261P6302.3

6WQ-SG

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Permit No.: 06S1261P6302

MAR 25 2014

REPLY TO: 6WQ

Certified Mail #7012 3050 0001 6500 2505 - Return Receipt Requested

Mr. Lanny Woods Jireh Resources, LLC 2526 E, 71st St., Suite A Tulsa, OK 74136

Re: Emergency Permit - Permit No. 06S1261P6302 Osage County, Oklahoma

Dear Mr. Woods:

Regulations at 40 C.F.R. §147.2906 provide for issuance of emergency permits to avoid a substantial delay in oil and gas production. In accordance with the provisions of those regulations, an emergency permit is issued to Jireh Resources, LLC for conversion and injection into Well No. 1, located in Osage County, Oklahoma at 400' FNL, 330' FWL, SE Quarter, Section 11, Township 24N, Range 7E.

As permittee, you are authorized to inject salt water for disposal under the following conditions:

- 1. Mechanical integrity of the well must be demonstrated, to the satisfaction of the EPA, prior to injection.
- 2. The permittee is authorized to inject salt water into the Simpson at an injection depth of 2888 to 2914 feet below land surface and into the Arbuckle at an injection depth of 2923 to 2930 feet below land surface.
- 3. Injection shall not result in the movement of fluid into an Underground Source of Drinking Water (USDW). The operating injection pressure at the wellhead shall not exceed 100 psig.
- 4. Injection volume shall be limited to a maximum of 30,000 barrels per month.

6WQ-SG: BHURLBUT: 3/7/14: 06S1261P6302.6

6WQ-SG 6WQ-S DELLINGER DWYER 5. During the emergency authorization period, the owner/operator shall comply with UIC regulations at 40 C.F.R. §147 Subpart GGG.

A complete permit application has been submitted. Emergency authorization to inject shall remain in effect until EPA issues a final decision on the permit application. Failure to abide with the above requirements is a violation of the Safe Drinking Water Act and may result in enforcement action.

If you have any questions, or would like to discuss this emergency permit, please contact the permit writer, Mr. Bill Hurlbut at (214) 665-8305.

Sincerely yours,

Kl David Garcia for

William Honker, P.E. Director Water Quality Protection Division

cc: BIA, Minerals Branch Osage UIC Office

U.S. Postal Service TM CERTIFIED MAIL TM RECEIPT (Domestic Mall Only; No Insurance Coverage Provided) For delivery information visit our website at www.usps.com		
O F Postage	TOTAL	WW.usps.com
Return Receipt Fee tEndorsement Required) Restricted Delivery Fee (Endorsement Required)		Postmark Here
Total Postage & Fees Sent To Street, Apt. No.; or PO Box No. City, State, ZIP+4 PS Form 3800, August 200	\$ H RESOURCE 26E. 715-757. SA, OK 7413	S (CC , SUTE A 36 Reverse for Instructions

U.S. Environmental Protection Agency Public Notice of Draft UIC Permit(s)

March 26, 2014

This is to give notice that the U.S. Environmental Protection Agency, Region 6, has formulated a Draft Permit for the following facility (facilities) under the Osage Mineral Reserve, Osage County, Oklahoma, Underground Injection Control (UIC) Program of the Safe Drinking Water Act. Development of the draft permit(s) was based on a preliminary staff review by EPA. The permit(s) will become effective within 15 days after the close of the comment period unless:

- A. Comments received by <u>April 10, 2014</u>, in accordance with §124.20, warrant a public notice of EPA's final permit decision.
- B. A public hearing is held requiring delay of the effective date.

EPA's contact person for submitting written comments, requesting information regarding the draft permit, and/or obtaining copies of the permit and the Statement of Basis is:

Ms. Evelyn Rosborough Planning and Analysis Branch (6WQ-NP) U.S. Environmental Protection Agency 1445 Ross Avenue Dallas, Texas 75202-2733 (214) 665-7515

EPA's comments and public hearing procedures may be found at 40 CFR 124.10 and 124.12 (48 Federal Register 14264, April 1, 1983, as amended at 49 Federal Register 38051, September 26, 1984). Additional procedures pertaining to Osage County may be found at 40 CFR 147.2929 (d), Subpart GGG. The comment period during which written comments on the draft permit may be submitted extends 15 days from the date of this Notice. During the comment period, any interested person may request a Public Hearing by filing a written request which must state the issues to be raised. A public hearing will be held when EPA finds a significant degree of public interest.

EPA will consider all comments submitted either in writing or at a public hearing when making its final permit decision. Any person that files comments on the draft permit may appeal the final permit decision. Persons who did not comment on the draft permit may appeal only those changes made to the final permit subsequent to draft permit issuance. Appeals to the final permit decision must be submitted in writing to the Administrator within 30 days after a final permit decision has been issued. An appeal must contain the information set out in 40 CFR 124.19 and 147.2929(j)(3).

EPA will notify the applicant and each person who has submitted written comments of requested notice of the final permit decision. A final permit decision means a final decision to issue, deny, modify, revoke or reissue, or terminate a permit. If a request for review of a final permit is granted, EPA will follow procedures found at 40 CFR 127.2929.

Further information including the administrative record is available for public review Monday through Friday from 8:00 a.m. to 4:00 p.m. at the Osage UIC Office, 100 West Main, Suite 304, Osage Agency Campus, P.O. Box 1495, Pawhuska, OK 74056 or at the EPA address referenced above. It is recommended that you write or call for an appointment so the record (s) will be available at your convenience.

The Environmental Protection Agency (EPA) has received a complete Underground Injection Control (UIC) permit application number 06S1261P6302 from

Jireh Resources, LLC 2526 E. 71st St., Suite A Tulsa, Ok 74136

The permittee proposes to convert well number #1 to a salt water disposal injection well located in the SE Quarter, Section 11, Township 24N, Range 7E, Osage County, Oklahoma. The application requests authorization to inject salt water into the Simpson formation at an injection interval depth of 2888 to 2914 feet and into the Arbuckle formation at an injection interval depth of 2923 to 2930 feet for salt water disposal. The Underground Source of Drinking Water is at a depth of 221 feet below land surface. A maximum of 30,000 barrels/month will be injected at a maximum pressure of 100 psig.

EPA has issued emergency authorization to the permit applicant to inject salt water into the referenced well. The emergency authorization shall remain in effect until EPA issues a final decision on the permit application.

The permit application, supporting data submitted by the applicant, the EPA draft permit modification and statement of basis are available for public review Monday through Friday from 8:00 a.m. to 4:00 p.m. at the Osage UIC Office, 100 West Main, Suite 304, P.O. Box 1495, Pawhuska, OK 74056, (918) 287-5333 or at the Environmental Protection Agency, 1445 Ross Avenue, Dallas, TX 75202-2733, (214) 665-7165. Comments on the permit application and draft permit should be submitted to the Dallas office within 15 days of the date of this notice. Anyone desiring a hearing must submit a written request, identifying the issue(s) for discussion at the hearing, to the EPA office in Dallas, Texas, before the close of business on the last day of the comment period. EPA will give at least 30 days notice of the public hearing, if a hearing is held.

Permit No.: 06S1261P6302

Scan Code: 07

The Environmental Protection Agency (EPA) has received a complete Underground Injection Control (UIC) permit application number 06S1261P6302 from

Jireh Resources, LLC 2526 E. 71st St., Suite A Tulsa, Ok 74136

The permittee proposes to convert well number #1 to a salt water disposal injection well located in the SE Quarter, Section 11, Township 24N, Range 7E, Osage County, Oklahoma. The application requests authorization to inject salt water into the Simpson formation at an injection interval depth of 2888 to 2914 feet and into the Arbuckle formation at an injection interval depth of 2923 to 2930 feet for salt water disposal. The Underground Source of Drinking Water is at a depth of 221 feet below land surface. A maximum of 30,000 barrels/month will be injected at a maximum pressure of 100 psig.

EPA has issued emergency authorization to the permit applicant to inject salt water into the referenced well. The emergency authorization shall remain in effect until EPA issues a final decision on the permit application.

The permit application, supporting data submitted by the applicant, the EPA draft permit modification and statement of basis are available for public review Monday through Friday from 8:00 a.m. to 4:00 p.m. at the Osage UIC Office, 100 West Main, Suite 304, P.O. Box 1495, Pawhuska, OK 74056, (918) 287-5333 or at the Environmental Protection Agency, 1445 Ross Avenue, Dallas, TX 75202-2733, (214) 665-7165. Comments on the permit application and draft permit should be submitted to the Dallas office within 15 days of the date of this notice. Anyone desiring a hearing must submit a written request, identifying the issue(s) for discussion at the hearing, to the EPA office in Dallas, Texas, before the close of business on the last day of the comment period. EPA will give at least 30 days notice of the public hearing, if a hearing is held.

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March 7, 2014 STATEMENT OF BASIS

For proposed Underground Injection Control Permit No.06S1261P6302 to convert well #1 to a salt water disposal injection well.

Issuing office: U.S. Environmental Protection Agency

Region 6

1445 Ross Avenue

Dallas, Texas 75202-2733

Applicant:

Jireh Resources, LLC

2526 E. 71st St., Suite A

Tulsa, OK 74136

- 1. As described in the application, the well is located in Osage County, Oklahoma, 400' FNL, 330' FWL, SE/4, Section 11, Township 24N, Range 7E.
- 2. On the basis of preliminary staff review, the Environmental Protection Agency has made a tentative determination to draft a permit for the conversion of this well as described in the application.
- 3. The following is an explanation of the derivation of the conditions of the draft permit and the basis for them as required under 40 CFR §147.2929 dated November 15, 1984:

40 CFR §147.2904

The area around the proposed injection well or project must be evaluated to ensure that the proposed injection will not cause movement of fluid into an Underground Source of Drinking Water (USDW) through improperly sealed, completed, or abandoned wells. The permit applicant submitted information on all wells of public record penetrating the injection interval within 1/4 mile of the proposed injection site and requested an injection rate of 30,000 barrels per month (B/M).

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06S1261P6302.2

6WQ-SG 6WQ-S DELLINGER DWYER Bloom tusk EPA did not calculate a "zone of endangering influence" (the lateral area around the proposed injection in which injection pressures may cause movement of fluid into a USDW) because the permeability of the Simpson-Arbuckle is so high due to fractures, that pressure buildup is not a concern.

40 CFR §147.2919(a)

The well must be sited so that injection is into a formation which is separated from USDWs by a confining zone free of known open faults or fractures within the area of review. The proposed injection interval in the Simpson is at a depth of 2888 to 2914 feet and in the Arbuckle is at a depth of 2923 to 2930 feet below land surface and is approximately 2667 feet below the base of the USDW. A review of available data has shown no evidence of faults or fractures in the confining zone within the area of review.

40 CFR §147.2919(b)

The well must be cased and cemented to prevent fluid movement into or between USDWs. The base of the USDW occurs at 221 feet below land surface. Since the surface casing shall be set at 308 feet below land surface and the long string shall be set at 2962 feet below land surface and cemented in with 100 sacks of cement, well construction is adequate in this case.

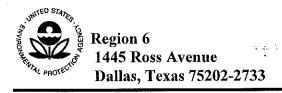
40 CFR §147.2920

To assure the protection of USDWs adjacent to the well bore, injection must be through an adequate tubing and packer. The packer must be set within 75 feet of the top of the injection interval. Since the top of the injection interval is at 2888 feet, the packer in this well must be set inside the casing between 2813 and 2883 feet of depth below land surface [40 CFR §147.2920(a)]. Injection pressure at the wellhead shall be limited so that it does not initiate new fractures or propagate existing fractures in the confining zone adjacent to any USDW [40 CFR §147.2920(c)]. In this well, the maximum injection pressure at the wellhead shall not exceed 100 psig.

To assure that USDWs are protected from injection fluids, the well must maintain mechanical integrity. Mechanical integrity must be demonstrated prior to operation and at least once every five years thereafter [40 CFR §147.2920(b)].

For additional information, please contact:

Ms. Evelyn Rosborough Administrative Support Team (6WQ-CA) U.S. Environmental Protection Agency Region 6 1445 Ross Avenue Dallas, Texas 75202-2733 (214) 665-7515



UIC Permit No. 06S1261P6302 Well No.: West Dalton #1

AUTHORIZATION TO CONVERT A WELL TO AN INJECTION WELL UNDER THE UIC PROGRAM **OSAGE MINERAL RESERVE**

In compliance with the provisions of the Safe Drinking Water Act, (hereafter referred to as "the Act" or "SDWA") as amended (42 U.S.C. §300f et seq.),

> Jireh Resources LLC 2526 E. 71st St., Suite A Tlsa, OK 74136

is authorized to construct a Class II salt water disposal injection well. This well is located at:

400 feet from the north line and 330 feet from the west line, Southeast Quarter, Section 11, Township 24N, Range 7E into the injection interval at a depth of 2888 feet to 2914 feet below land surface in the Simpson and at a depth of 2923 feet to 2930 feet below land surface in the Arbuckle in accordance with the construction and operation requirements, injection pressure limits, reporting and monitoring requirements, and other conditions set forth in Parts I and II of this permit and the Osage Class II Underground Injection Control Program and Regulations.

Unless authorization to inject is granted, this permit shall remain in effect for one year from the effective date shown below. Authorization to inject fluids into the well shall be granted only upon compliance with permit conditions, I.A.1., I.A.2., I.A.3., and I.B.1. Authorization to inject fluids into the well may be verbally granted by the Chief, Ground Water/UIC Section or by written "Authorization to Inject" from the Director, Water Ouality Protection Division (6WQ). Upon authorization to inject, this permit shall remain in effect until the well is plugged or the permit is terminated.

This permit shall become effective on

Prepared by

Issued on

Bill Hurlbut

Geologist

Ground Water/UIC Section

(6WQ-SG)

RU-3(10)

William Honker, P.E.

Director

Water Quality Protection

Division

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6WQ-S

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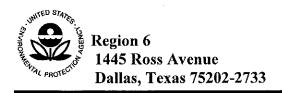
Part I. SPECIAL PERMIT CONDITIONS

A. Construction Requirements

- 1. The surface casing shall be set at 308 feet below land surface and the long string shall be set at 2962 feet below land surface and cemented with 100 sacks of cement.
- 2. The well shall be equipped with standard female fittings with cut-off valves connected to the tubing and the tubing/casing annulus so that the injection pressure and annulus pressure may be measured by an EPA representative by attaching a gauge having a standard male fitting.
- 3. Tubing and packer shall be installed. The packer shall be run on the tubing and set inside the casing between 2813 and 2883 feet of depth below the land surface.

B. Operating Requirements

- 1. Authorization to inject will not be granted until the permittee shows to the satisfaction of the Director, Water Quality Protection Division, pursuant to 40 CFR §147.2920(b)(1)(i) that the well has mechanical integrity. The well's mechanical integrity must be demonstrated prior to the start of injection and at least every five years thereafter. The permittee must notify the Osage UIC office at least five (5) days prior to mechanical integrity testing so that an EPA representative can witness the test.
- 2. Injection pressure at the wellhead shall not exceed 100 psig.
- 3. The permittee is authorized to inject salt water for disposal.
- 4. Injection volume shall be limited to 30,000 barrels per month.



UIC Permit No. 06S1261P6302 Well No.: West Dalton #1

AUTHORIZATION TO CONVERT A WELL TO AN INJECTION WELL UNDER THE UIC PROGRAM OSAGE MINERAL RESERVE

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> Jireh Resources LLC 2526 E. 71st St., Suite A Tlsa, OK 74136

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This permit shall become effective on

Prepared by

Issued on

Bill Hurlbut

Geologist

Ground Water/UIC Section

(6WO-SG)

6WQ-SG: BHURLBUT

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6WO-S

DELLINGER DWYER

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William Honker, P.E.

Director

Water Quality Protection

Division

06S1261P6302.1f

Part I. SPECIAL PERMIT CONDITIONS

A. Construction Requirements

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